**3GPP TSG-RAN WG4 Meeting #110bis R4-2406298**

**Changsha, China, April 15 – 19, 2024**

**Title:** WF on SL Relay RRM performance requirements

**Agenda Item:** 6.22.3

**Source:** LG Electronics

**Document for:** Approval

# 0 Introduction

This WF includes the agreements and open issues discussed in topic summary for [110bis][226] NR\_SL\_relay\_enh.

# 1 Topic 1: RRM performance requirements

### Sub-topic 1-1 RRM performance requirements for R18 sidelink relay UE

**Issue 1-1-1: Whether include the out of coverage scenario to the applicability description for the accuracy requirements of SD/SL-RSRP for R18 SL remote UE performing relay UE selection/reselection in multipath scenario.**

* Agreement:
  + Existing accuracies of SD-RSRP and SL-RSRP in clause 10.4.5 shall also apply for the remote UE in the multipath scenario provided that the remote UE:
    - is synchronised to the sidelink relay UE that is measured and
    - is in-coverage on the frequency used for sidelink if both the direct path and the SL on the indirect path are on the same frequency or
    - is out of coverage on the frequency used for sidelink if the direct path and the SL on the indirect path are on different frequencies.

### Sub-topic 1-2 Test cases and scenarios for R18 sidelink relay UE

**Issue 1-2-1: Test case for delay of selection/reselection of relay UE by remote UE in U2U relay scenario**

* Agreement:
  + RAN4 to define a test case to verify selection/reselection of relay UE by remote UE in U2U relay scenario.

**Issue 1-2-2: Applicability rule for delay of (re)selection of relay UE by remote UE**

* Agreement:
  + To limit testing, define an applicability rule in annex A of TS 38.133, that the UE capable of both U2U relay and U2N relay operations is required to pass only one of the two test cases: under U2U scenario or U2N relay scenario.

**Issue 1-2-3: Test requirements for delay of selection/reselection of relay UE by remote UE in U2U relay scenario**

* Agreement:
  + Not restrict the scenario with out of coverage scenario.

**Issue 1-2-4: Test cases for interruptions caused by SL DRX activation and deactivation of remote UE in multi-path relay scenario**

* Agreement
  + There is no need to define new RRM accuracy requirements for R18 enhanced SL relay. The existing requirement shall apply.
  + For interruption requirements, and the existing test case is not necessary to be updated to accommodate the new scenario for Rel-18.

**Issue 1-2-5: Applicability rule for interruptions caused by the remote UE and the relay UE on their serving cells due to the transitions between the active and non-active times of the SL DRX**

* Agreement
  + According to the issue 1-2-4 decision, This issue is not necessary to discuss.

### Sub-topic 1-3 CR works

**Every open issues are closed and 2 formal CRs are necessary by next meeting.**

**CR work split is as follow:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Requirements for or test cases for** | **Detail** | **New or impacted section in TS38.133** | **Volunteer Company** |
| 1 | Intra-frequency Discovery Signal Measurement Accuracy | According to the agreement issue 1-1-1, it is necessary that the applicability description should be updated.  - Addition of the out of coverage scenario. | 10.4.5 | Ericsson |
| 2 | Selection/Reselection of relay UE | According to the agreement issue 1-2-1, 1-2-2, the test case for delay of selection/reselection of relay UE by remote UE in U2U relay scenario should be defined | A.9.1.X | Nokia, LGE |